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ABSTRACT

This monograph provides a perspective to academic institutions, especially the developing institutions, to look at themselves in critical ways in order to: improve their capability in academic planning and development; develop useful techniques that will enable them to allocate limited institutional resources more efficiently into the academic program; and develop unique innovative learning environments for their students. Following an introductory section, a conceptual framework for academic planning and curricular analysis are discussed. The framework is presented with which academic planning might be conducted. The curricular analysis outlines a general scheme for reviewing and evaluating the departmental academic program. A 41-item bibliography is included. This document is published through the Technical Assistance Consortium to Improve College Services (TACTICS). (Author/MJM)

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Planning The Academic Program

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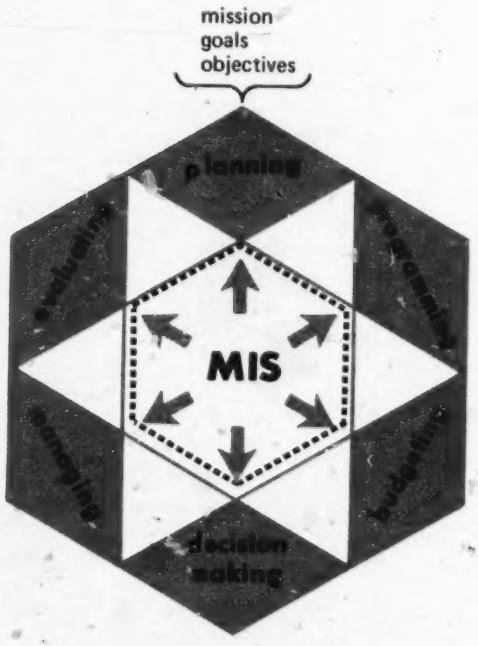

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PLANNING THE ACADEMIC PROGRAM

PREPARED FOR THE COLLEGES IN THE
COOPERATIVE ACADEMIC PLANNING CONSORTIUM

by

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INSTITUTE FOR SERVICES TO EDUCATION

2001 S Street, N.W. Washington, D.C. 20009

MAY, 1973

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Foreword

One of the things ISE has learned in the last seven years is the difference between educational experimentation and innovation and institutional change. Had we been smarter or more insightful we would have anticipated that though you create good strategies for teachers in terms of teacher satisfaction and student satisfaction in terms of subsequent performance in college, institutional issues are more important. The structure of an institution in its course and credit layout, its departmental requirements, its faculty training and interest determine the likelihood of lasting change. Rarely are these things the result of an overall plan. The decision on educational matters becomes involved in structural questions decided in the context of how many hours are required in basic and advanced courses.

Higher education personnel by training and by experience are least interested in institutional issues and most interested in course level and departmental level issues. They approach their problems with a departmental perspective that views other departments as competitors for resources in space, in personnel, in student majors, which add up to money. This monograph argues for a broader perspective. It is aimed at academic leadership on the college-wide or university wide level. The tough job is to have a wider perspective taken seriously particularly by faculty. Committees are a way of life and are cynically viewed by college personnel. If, however, it is clear that the quality of collective work will be related to the allocation of resources in an institution then the competitiveness may be put to good use. If it is clear that those groups which take seriously developing logically related programs, not collections of the favorite courses of faculty, will receive favored treatment, then programs may begin to appear.

Those responsible for educating large numbers of black youth in such a way as to deal with their special status in American life need coherent programs. It is a complex job to deal with basic skills, inadequately developed, academic motivation for rigorous work, competency in a discipline, professional orientation and

insight into the status and role of educated black men in America. A systematic approach to ascertaining that all these things are being done is mandated. Any institution that does not deal with all these issues will be jeopardizing its healthy future.

The persuasiveness that is needed for a predominantly black college to generate the financial support it requires is directly related to solid answers to the questions posed in this monograph. In a racist society more is required of blacks for success in too many instances, but as with individuals, institutions must survive and come to flourish in an unfair environment. This document suggests a way to approach the problems for those who would embrace it.

Elias Blake, Jr.
President
Institute for Services to Education

Preface

The idea for this monograph emerged from the work that the Office of Cooperative Academic Planning (CAP) has been doing with a number of the traditionally black colleges over a two year period in the areas of curricular development and academic planning. Funded, in 1971, as part of a special Office of Education project to provide technical assistance to black colleges, CAP had the responsibility to initiate a program involving these institutions in a systematic program of academic planning. We have found the effort of recording our thoughts helped us clarify our thinking about a conceptual framework in which academic planning might be conducted. We hope faculty and administrators find it helpful.

In a sense, then, this monograph can be viewed as a workplan for the CAP program. Although it has been written with specific reference to the traditionally black colleges, we believe that it also has applicability to a wider range of insitutions.

The material presented in this monograph has been written in other books and articles in some form at one time or another. What we have attempted to do here, as an aid for faculty in academic planning, is to organize the material in a manner which stresses the importance and relationship between curricular analysis and academic planning from the viewpoint of a systematic approach to academic administration.

We are indebted to the participants and consultants of the CAP workshops for their encouragement and assistance to us in the writing of this document.

E. O. W.
S. J.

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Introduction | 1

It is the belief of the Institute For Services to Education (ISE) that curricular development activities in educational institutions should be based upon broad educational postulates. One basic assumption in publishing this mongraph is that every institution of higher education is a unique entity with its own specific objectives. Consequently, it is recognized that each college must work out its own plans for curricular improvement by defining its own problems, setting its own priorities and solving its problems in the light of its traditions and resources. To this end, the emphasis of this monograph is placed on institutions defining their own strategies for curricular design on their respective campuses.

Need For Systematic Approach In Academic Planning

Due to the present and anticipated severity of financial constraints in higher education, it is imperative that colleges and universities undertake comprehensive planning for their survival and viability. Furthermore, the public and private sectors of society are making demands on institutions for more accountability in their operations. Colleges and universities held a vaunted and esteemed position in society before World War II; during this period they were sheltered places where peace and quiet reigned. Often, institutions were able to "get by" in their management operations without accounting for their actions to a knowledgeable or interested public. Since the middle 1950s,

however, colleges and universities have been confronted with unprecedented challenges brought about by the impingement of successive waves of change such as burgeoning enrollment, inflation and the concomitant spiraling educational costs, student and faculty unrest, and open admission demands.

The current pressures on higher education call for major planning thrusts to broaden educational opportunity, improve and enhance the relevance of instruction, improve efficiency of institutional operation, and restore public confidence in the purposes and activities of higher education. In response to these developments, institutions of higher education must critically assess themselves and prepare to meet the present and future challenges. The exigencies of the times require careful study and planning.

In addition to these stresses on all of higher education, there are special stresses impinging upon the traditionally black colleges. The problems of these institutions have increased dramatically since the Supreme Court decision of 1954 when the Court declared the existence of separate but equal educational facilities to be illegal. Four substantively different but overlapping problems of these institutions are discussed below:

Financial – black colleges, as a group, were in a weak financial position even before the current crisis in educational financing. The ensuing crisis in financing higher education has perhaps hit them much harder than it has hit most predominately white academic institutions. Such financial difficulties make it harder to innovate, expand in new directions and even maintain current postures within the institutions.

Competition For Black Students – competition from predominately white colleges has made it increasingly difficult for black colleges to get the academically able black student on whom it has – until recently – had a monopoly. As late as 1950, 90% of black students in college attended predominately black institutions; today less than 40% attend such institutions.

Existence Threatened – until the 1954 Supreme Court decision, the question of the necessity of black colleges was never raised; with de jure and de facto segregation as the national operating policy governing the relationships between the races, black colleges were needed if black college graduates were to be produced. Increasingly in the current dialogue regarding these institutions, one hears that such institutions have no place in an integrated society – that they only serve to accentuate the differences among the races and are, in fact, divisive institutions and should be eliminated.

Academic Quality – frequently mentioned as another justification for the dissolution of these institutions is the assertion that they offer an academic program of a lower and/or inferior quality to white institutions. Since this belief is so widespread within the broader American community, it places the black colleges in a position almost as tenuous as at the time of their inception.

Increasingly throughout higher education there are heavy demands for change in quality of the curriculum and instruction, in subject matter, and in the form and content of the educational process. The question that is being asked more and more of higher education is, "Can higher education become more efficient and more accountable?" On the other hand, colleges and universities are asking, "How do we measure the quality of education and its successful effects?" These pressures on higher education force academic organizations to devise viable strategies for coping with such a dynamic environment.

Management Technology In Higher Education

The demand on the human, physical and financial resources of higher education requires innovation and flexibility in the following two related areas:

1) Achieving educational objectives
and
2) Efficiently and effectively allocating the resources of the educational enterprise in order to encourage the process of education.

The demands on the educational enterprise have forced educational personnel to look outside of traditional educational administration for assistance in educational planning and management. Managerial concepts in business, industry, military and government administration suggest methods applicable to the management of higher education resources. Increasingly, these managerial concepts are being applied to educational organizations. These tools of management have a variety of names: "Systems Analysis", "Cost-benefit Analysis", "Management by Objectives", "Operations Research", "Planning, Programming, Budgeting", and "Accountability".

College and university personnel have demonstrated much apprehension about utilizing the concept of a business or "product-molding" organization as a model for the educational process. The notion that education converts raw people into finished or productive people is troubling to those in

non-industrial organizations which are "people-molding" as opposed to "product-molding" organizations.

One of the purposes of academic institutions, however, is to change people or at least to play a role in their change. Prospective students enter such institutions, are exposed to its environment, and after going through a number of processes or experiences successfully are certified in one way or another and become graduates (products) of the given institutions. To produce this graduate, resources are allocated and channeled in such a way as to move students to the final destination point. The time the whole process takes as well as the nature of it are all matters of concern to academic personnel; the number of rejects that the system produces, as well as the unit cost per student are of equal concern.

The more one thinks about academic institutions the better one is able to recognize the close similarities between them and business organizations. Colleges must begin to create conditions for effective planning. Technical concepts borrowed from business organizations, though not directly applicable to the quantitative solution of educational problems, can be of use in thinking about these problems.

A Systematic Approach to Curriculum Development

This monograph suggests that the use of a systematic approach to curricular development at colleges and universities will prove quite effective in program planning exercises. The concept of systems analysis may be defined as an orderly way of identifying and ordering the differentiated components, relationships, processes and other properties of anything that may be conceived as an integrated whole. Systems analysis is suggested as a blueprint for academic planning and it implies no particular dogma, educational philosophy, or curriculum. Within this framework it is simply a philosophy and a way of introducing systematic organization and responsibility into the total enterprise of education. One major requirement of such a framework is that academic leaders must be skillful in asking the kinds of questions that are relevant to the decision making process in their institutions. An especially important element in this schema is that the decision maker recognizes the impact

that certain decisions will have on the total educational environment. For example, three questions, among many, that seem especially important to raise on getting involved in curricular analysis are: (1) Is the curriculum achieving what it claims? (2) Are the goals of the instructional program consistent with what the institution hopes to accomplish? and (3) Is what the institution hopes to accomplish relevant to its clientele and societal needs? These questions and many more need to be raised regarding the curriculum in order to obtain the kind of information needed for good planning.

Factors Affecting Curriculum Development in Black Colleges

Even a casual examination of the traditionally black colleges shows that since their inception, systematic analysis as an activity has always existed. Surely, since the very start of these colleges, decisions about expanding courses of study, credit hours for courses and curricular thrusts were not based on random guesses but were undoubtedly based on the best available evidence and careful investigation. When Booker T. Washington, for example, started Tuskegee Institute in 1881 he proceeded along a line which, if viewed in the modern context of educational planning, would be classed as a systems analysis approach. The curriculum at Tuskegee in 1881 was designed only after Booker T. Washington had carefully assessed the ability of his students, the prospective job market for his graduates, the status of race relations in the country, the needs of the immediate Tuskegee community and so on. Other black colleges, indeed most colleges, have gone through a similar procedure in finding their own particular niche in the academic market place.

Nevertheless throughout their existence a variety of external factors – rather than internally conducted systems analysis – have determined the thrust of curricular development and planning at black colleges. The revenues supplied by agents external to the schools – white philanthropists, churches, state legislatures, and the Federal government – were vital insofar as without such assistance, the institutions would not have existed. Since black people had little – if any – political or economic

clout, the strings attached to such assistance usually prevented the administrators of the institutions from developing and planning curricular that might have been especially suitable to the needs of their students.

For example, in the latter part of the 19th century industrial education for blacks appealed to both white southerners and northerners. Consequently most philanthropic support for black education for over fifty years went to trade/vocational types of black institutions (Hampton, Tuskegee, the A & M and A & T institutions) after the John F. Slater Fund adopted a policy in 1882 that it would favor schools with industrial programs. The few institutions like Morehouse, Fisk, Atlanta, Talladega, which tried valiantly to provide a genuine collegiate education to blacks languished in poverty and neglect until around the 1930s.

Since whites have had the dominant role in determining both the character and degree of support to black colleges, the internal development and academic planning of these schools have been related directly to the shifting political and social relations between whites and blacks in the society. Therefore, the black colleges have been forced to imitate others in order to be accredited and have not been able to be innovative and independent. These institutions have been forced to develop according to standards set by foundations, state governments and philanthropists rather that those set by the colleges and the communities they were intended to serve.

The political and economic leverage gained by blacks in the last decade and the rather obvious need by the black institutions to cultivate a constituency to provide a base of support may allow a few of the traditionally black colleges an opportunity to begin an era of academic planning and curricular development. Such efforts should be based upon broad educational postulates that hold potential for providing worthwhile educational experiences for their particular clientele. In any case, black colleges – like others – must become increasingly prepared to defend and justify on a rational basis what it is that they are doing in their educational programs.

Purpose of Monograph

The purpose of this monograph is to provide a perspective to academic institutions, especially the developing institutions, to look at themselves in critical ways in order to:

* improve their capability in academic planning and development;
* develop useful techniques which will enable them to allocate limited institutional resources more efficiently into the academic program;
* develop unique innovative learning environments for their students.

Following this introductory chapter are two chapters and a bibliography.

Chapter 2 – A Conceptual Framework For Academic Planning – presents a framework within which academic planning might be conducted.
Chapter 3 – Curricular Analysis – outlines a general scheme for reviewing and evaluating the departmental academic program.
Bibliography – presents general references.

2 A Conceptual Framework For Academic Planning

As finances become tighter during this decade, many colleges and universities that do not have the ability to plan effectively will not survive. Each institution must exploit and develop its own particular strengths and recognize its weaknesses in developing such a survival kit. In particular, it seems that a number of the developing institutions face an uncertain future unless they establish viable strategies for growth and development.

Historically, whatever planning of any sort that has been done in academic institutions has been piecemeal, ad hoc, crisis oriented, and fragmented. In response to external exigencies, in recent years colleges have taken steps towards putting planning on a more substantial plane. The U.S. Office of Education, among others, is currently offering financial incentives to developing institutions to upgrade their planning capability. Such incentives are especially necessary for developing institutions since so many of these schools lack other resources that can be tapped in order to initiate such efforts on their own.

It should be noted, however, that these planning activites are developing along essentially quantitative lines – focusing on such items as enrollment, cost of instruction, average class size, space utilization, and other such "housekeeping" matters. This type of planning although vitally necessary to the smooth functioning of the institution, is only one side of the total planning picture. Unfortunately, the more qualitative aspects of institutional planning – such as educational policy – have been neglected by these external bodies. To take the case of the traditional black colleges, it would seem, for example, that as

increasingly more of their traditional clientele go to other types of schools, it would be vitally necessary that these schools rethink their basic policy regarding a host of educational (qualitative) matters and program design. This chapter will present a framework for considering some of these qualitative issues related to academic planning.

CURRENT STATUS OF ACADEMIC PLANNING

Departmental Planning

Academic planning in many small colleges, especially the developing ones, at the present time is essentially limited by the pressures of day-to-day operational matters. The combination of the pressures of daily operations and the lack of a specialized planning or research department means that systematic long range educational planning is neglected. What educational planning is done is really at the departmental level.

The coordination of such program planning usually comes under the aegis of a general faculty committee appointed by the President, elected by the Faculty Senate or constituted through a council of departmental chairmen. In almost all cases, there are student representatives on such a committee. Theoretically, these committees represent the total perspective of an institution in terms of its mission, goals and long-range plans; however, they seldom do.

The existing academic policies committees' primary function is limited to a short range perspective such as: evaluating proposals for new courses; listening to proposed changes in departmental degree requirements; considering general education requirements. The items which come before these committees are given only superficial consideration – they do not take into consideration the relationship between the mission and goals of the institution and the proposals before them. Normally, these committees approve all academic items which come before them. Faculty committees, in general, are very reluctant to analyze critically proposals submitted by their colleagues from specialized areas. Hence, very little, if any, on-going academic planning within the context of institutional

comprehensive planning is taking place in many small, developing colleges. In many institutions practically no provisions have been made to carry out continuous self assessment of educational matters and to affect changes in personnel, programs and performance in order to improve the learning experiences on these campuses.

Institutional Planning

Institutional planning of a comprehensive nature is a process whereby an institution defines its mission and role, establishes objectives in keeping with that mission and role, devises activities and programs to attain the stated objectives, organizes and allocates resources to implement the activities and programs, and evaluates the results in terms of the objectives.

Essential to the development of a successful planning process is an adequate and viable organizational structure for legitimate involvement of on-campus groups (faculty, students and administration) and off-campus groups (supervisory boards, funding agencies and community) in the planning process. The planning process requires substantive studies and research – a wide range of research data and information collected systematically about the institution and its environment over time. From an operational point of view it may be more meaningful to look at institutional planning on three levels: long-range planning; intermediate planning; and annual planning.

Long-range planning attempts to chart the course of the institution over a period of five to ten years whereas intermediate planning attempts to develop a specific plan for the next three to five years. Annual planning is a periodic, relatively short term review, and is directly related to the program evaluation and budgeting processes of the institution. It should be recognized that there is a synergistic relationship among the three levels of institutional planning. Neither the long-range plan nor the intermediate plan is to be viewed as an inflexible chart for the future. Rather, they should be adaptable to future needs and exigencies as will be evidenced by the annual planning process which provides continuous planning, reviewing and analyzing for moving the long-range plan.

There are two "hidden" dangers in long-range planning and intermediate planning. They are: (1) that every subsequent innovation or suggestion might be dismissed because it is not in the plan; and (2) that the plans will be placed on exhibit and everyone goes about business as usual under the illusion that all the problems of the institution have been solved and everything is automatic for the next three to five years. However, these hidden dangers can be avoided with a systematic annual cycle of planning, reviewing and analyzing the institution's programs. Annual planning should provide for well analyzed information and recommendations for changes in the planning documents. The common task of developing comprehensive planning by the constituency of an institution will demand examination and consideration of many essential questions. Among these are:

- For what purpose was the institution established?
- Why does the institution exist?
- Where has the institution been?
- Where is the institution now?
- Where is the institution going?
- How does the institution plan to get there?
- Whom should the institution serve?
- Why should the institution serve them?
- How would the institution serve them?

Effective planning will help an institution take into account its realities: its present faculty, its present students, its physical plant, its financial security and prospects, its public service commitments, its recognition and standing in the academic community and its *modus operandi* within the realm of the possible.

The domain of curricular decisions and formulation of broad educational policy in institutional planning is clearly the undisputed responsiblity and prerogative of the faculty. The faculty has primary responsibility for courses, curriculum, graduation requirements, research, faculty status, methods of instruction and those aspects of student life which relate directly to the educational process.

Heretofore, faculty has been reluctant to participate in institution-wide planning. This reluctance on the part of faculty has been reinforced by the attitudes of both administrators and faculty: administrators have thought of faculty as being impractical and lacking institution-wide perspective and thereby have placed them in a somewhat secondary role in the planning

process; on the other hand, faculty has thought of institutional planning as an administrative function and that their responsibility was to their discipline. However, faculty, as well as administrators, must come to realize that planning is a legitimate part of their role and must accept the responsibility for academic planning in the broad context of institutional planning. For this to happen, there must be a change in attitudes on the part of both administrators and faculty. Specificially, there are several faculty attitudes which must change drastically:

* Provincialism in orientation to their discipline
* Conservatism and traditionalism which cause them to operate with a one or two year perspective in their teaching
* Inability to carry on meaningful discussions that cross academic lines
* Reluctance to look at the instructional program as a whole because of lack of understanding of another discipline and fear of the cross-fire among faculty power enclaves
* Fear of presumptuousness in telling academic specialists what they ought to be doing
* Natural tendency to protect existing structure and policies
* Natural tendency of reaction to rather than creation of change and innovation.

Administrators must accept the fact that certain conditions must prevail in order for faculty committees to make major contributions to comprehensive academic planning. These are:

* Released time for faculty to make significant studies and plans
* Adequate secretarial assistance, office space and other needed support
* Adequate research personnel and/or a functioning office of institutional research to make routine studies and substantive studies and research
* Money for travel and outside consultants.

INSTITUTIONTIONAL MISSION GOALS AND OBJECTIVES

Goal Setting

The first and most basic task of planning is clarifying the institutional posture as expressed by a mission statement. It is essential that an institution understands: who it is; why it is; and what it is. The clarification of institutional mission and role

identifies the special competencies and inadequacies and points up new directions as well.

The second task in planning, and perhaps the most difficult one, is in obtaining a convergence of opinion among the institution's constituencies regarding appropriate goals for the institution. The different constituencies of an educational institution may want different things manifested by their areas of special interest. However, an institution must recognize that it cannot do all of the things that various pressure groups may want it to do. An institution must choose among alternate directions and priorities. The goals tie together assumptions, values and hopes for the institution in an over-all direction that provides guidelines for the operation of the institution. They provide the *raison d'etre* of the institution for relevant on-and-off campus groups, including faculty, students, administrators, community, trustees, alumni and funding agencies.

Numerous monographs on goal setting have been written. The National Laboratory for Higher Education's Research Monograph Number 2 on "Identifying Institutional Goals" by Norman P. Uhl briefly reviews the literature on development of an institutional goals inventory. In this document Uhl discusses in considerable detail convergence of opinion on goals through the Delphi Technique. Uhl also outlines capabilities which must exist or be developed in an institution for efficient allocation of resources to achieve specified goals:

- A procedure for clarifying and generating an understanding of goals.
- The ability to derive measurable objectives from the goals.
- The ability to provide the information necessary for allocating human and financial resources to support the agreed-upon objectives.
- The ability to use inputs from all levels in planning and decision making, and to obtain support for these decisions.
- Proper evaluation of the degree to which the objectives are attained.

Goals are essential to all institutional planning and serve as intelligent guidelines for the institution in its work. Because an institution is currently in full operation goal setting and the resultant planning should, as much as possible, take cognizance of the *givens*, and it must be practical and capable of implementation. In a word, the academic planners must be fully cognizant of the limitations of their institution's financial, physical and human resources.

Goals As A Frame Of Reference

In discussions of curricular matters. and in all major policy questions having to do with the nature of the institution, the goals must be used *as a frame of reference.* The design of all institutional programs and activities should be consonant with its goals. For example, if the projected size of the college has been determined then it is important that all planning take account of the fact. Appropriate faculty groups and students should reconsider from time to time the stated purposes and goals and suggest revisions. In this way the college community will be forced to reconsider its reason for existence. Points to consider in analyzing a curriculum are discussed in the next chapter. When revision in direction is made, faculty and students should be consulted. They should discuss the reasons for the changes to be proposed and consider their implication.

Once the institution has agreed upon its mission and goals, then the next step is to translate goals into specific objectives for the design of instructional programs. Objectives may be looked upon as the decisions regarding goals and the mission of the institution.

PLANNING THE ACADEMIC PROGRAM

Student Centered Instruction

Academic programs and activities are designed to encompass all of the institution's efforts to achieve a particular set of objectives. Thus, in academic planning it is institutional objectives which are translated into programs and activities. An institution's curriculum results from the planning of a coherent relationship between the design of programs to match objectives and what the college will attempt to achieve and be. The curriculum represents the institution's operational program to help the student to an awareness of his intellectual and spiritual heritage, of his responsibilities, and of his own nature. To this end, curricular planning must take into account factors such as: emerging needs of the present and the future, how students learn and their interests and aptitudes, content of courses, and

teaching methodology. Faculty members should be made aware of theories about human behavior that may enable them better to relate stated objectives and goals to the experiences which their students bring with them. The curriculum in an institution must be designed to meet the needs of the students on campus. Curricular planning must be based upon the nature of the student clientele; who they are, what they are like, what their aims are, and whether or not they are being challenged. An institutional curriculum must be designed for the type of student enrolling in the institution; or an institution must change its selection of students to match its curriculum.

Designing the Educational Program

The first step in the process of program planning is to establish the goals and objectives of the institution's educational program. What does the college wish to achieve through its lower division program? Will it be accomplished though a program of general education, core curriculum experiences, remedial exposure, a mixture of all three, or something else? Why? What is the place of specialized education in the college curriculum? How should the upper level specialized educational program relate to the lower division program? How does the college view liberal education? What is its place in the curriculum? Is the extracurricular life of students reinforcing their curricular experiences? The responses to questions such as these should lead to suggestions for the kinds of educational experiences which the institution should attempt to provide its students in order to realize its convictions about education. Educators should constantly ask themselves: "What am I doing, and why am I doing it this way?" And, of course, they should seek answers to such questions in order to do more effectively whatever it is that they do.

Colleges need to maintain a certain amount of clearheadedness about what it is that they are doing in the educational program. For example, whatever one might choose to call the lower division program, at most places the name general education does not describe it very well. Many agree that today's lower division program consists of two elements: core courses and introductory courses. Usually, though not always,

specialized courses are limited to the upper division. There are difficult considerations to ponder before deciding on the mix of these elements in the curriculum. But decisions are reached: the point is whether such decisions are supportive of the goals of the educational program.

The second step is to establish programs that move towards the goals and objectives that have been established. The primary means by which educational programs are accomplished is through a course structure. Colleges that serve a predominately black population need to be especially sensitive to a number of the needs of their students and society. Perhaps the two most important needs of their students are: the developmental needs and the vocational needs.

It has been suggested by a number of leading black educators that the curricula at black colleges is dysfunctional to the real needs of their students. It is the position of these educators that the curricula at these colleges have not articulated very well with the prior experiences and psychological situations of its students; and further that the thrust of their curricula is to prepare graduates who do not fully appreciate the realities of the work world that they must enter upon graduation. However, all colleges not just black colleges must be intellectually honest with their students.

An aspect of this honesty is a requirement that colleges help their students to acquire the capabilities that will make them productive human beings, especially within the American context. The college educational experience needs to address itself to developing at least the following capabilities in their students:

- Communication – The ability to relate meaningfully to other human beings
  - Reading
  - Listening
  - Research, Writing analysis
  - Mathematical reasoning
- Vocational – the ability to "make a living"
- Leisure – Recreational – the ability to engage in productive non-economic activities
- Civil involvement – the ability to participate effectively in the socio-political life of the social order
- Self awareness or maturation – The ability to understand one's self. Sometimes one needs to be reminded that colleges and educational organizations, in general, are the places where students should be led to a greater understanding of their own values and attitudes. In some sense, colleges should force their students to an examination of where they stand. Not many do.

The Lower Division Curriculum

The lower division curriculum, because it provides the foundation for what is to follow, is an important element in any college's total academic program. At the black colleges, as has been stated previously, the need to design and implement a well-conceived curriculum in this area is extremely vital to a student's educational development because he probably arrives at the college under-prepared for higher education. Particular courses, with special characteristics should be designed to translate the institution's convictions about liberalized education to classroom practice. In the translation, concern should be manifested for relatedness of the institution's general philosophical position and methodological procedures.

Through the years, models for general education programs have come from St. John's College (The Great Books), The University of Chicago (The Prescribed Set of Western-Oriented Experiences Courses) and Harvard College (The Elective-Distribution System). In many colleges a lot of skills development in the composition and computational areas (remedial education) is an integral part of the lower division program. Only by stretching one's imagination could one call these latter type courses general education courses; indeed the purpose of these courses is to complete a task that elementary and secondary education fail to do. The point to be made, however, is that each college must decide for itself what goals it seeks for its introductory educational program – general education, skills development, vocational, or a mixture of the three. Another vital question is whether the freshman and sophomore years are the most appropriate ones in terms of the developmental needs of late adolescents to teach general education courses. Many would argue that such courses are best taught at the upper level when students have something more to contribute and are better qualified by prior learning for such courses.

Several factors should be considered in the selection of lower division courses. These are:

* Courses should be among the very best courses taught at any level in the college. They are meant to serve a particular function. In some cases (particularly for students who have a large major-minor sequence in a discipline such as chemistry), they must fulfill the liberalizing function of the curriculum.

- Courses must be taught in such a way that they are more than a body of unfamiliar information. They should show the vertical dimension of a discipline by answering what is the field of data for this discipline? What requirements must be met for something to be considered knowledge in this discipline? What are the presuppositions requisite to inquiry in this discipline? These courses should also reveal the horizontal dimension of a discipline by answering what is the relation of this kind of inquiry to others that either depend upon it or to inquiries with which it is often confused? What is peculiar to this discipline and what does it share in common with others? What other disciplines are required to gain a broad view of the entire subject area? It is obvious that these things should be true not only of lower division courses, but all courses listed in an institution's catalogue. It is emphasized though, that they must at the very least, be true of lower division courses.
- Lower-division courses should meet the needs of the students and their environment. The material should articulate with prior education of students and with life outside of the curriculum. Particularly, in the social science and humanities areas the material should prepare the students to grasp the realities of the American society. Students need a functional education to deal with the American society.
- Courses should be designed for the student's freshman year to develop skills in the areas of composition, argument and inference, research and reporting, and mathematical computations.

A basic administrative structure must be planned to give strong leadership to the lower division program. This program must have an administrative structure that protects it from becoming a "step-child" of academic departments. In general, departments are concerned with the advancement of a particular discipline and not with the general education of undergraduates. The administrative structure of the lower division program must have the authority to recruit faculty with its own budget. It must be able to advance faculty to senior tenured ranks. Somehow the general program must not be tied to departments with responsibilities for preparing majors. In no area is a curriculum likely to become moribund so rapidly as in the general requirements. Once a course is required of all students it may never again be rationalized and never eliminated from the list. It is of utmost importance that appraisals be made periodically of general educational requirements to determine whether the courses required do in fact meet the needs of the students and the objectives of the program.

Liberal Education and Specialization

The upper division educational program has usually been reserved for specialization in American colleges and universities. The trend towards the increasing specialization required by the world of work of college graduates with the concomitant infusion of specialized courses in the once distinctive general education program in the first two college years has led to an assumed crumbling of the old ideal of liberal education. This has troubled academics. Some intellectuals like Jacques Barzun believe that liberal education, as such, is rapidly fading into the background at too many undergraduate institutions. Seemingly Barzun, like many others, views liberal education as an accumulation of courses and credits that one may take in the disciplines of history, English, the arts, and so on, (usually in something called the core courses). However, liberal education may more properly be described as a manner of teaching and learning, and as the kind of student that a college strives to produce.

Liberal education is not merely the exposure to materials. Properly conceived, it should be the process by which faculty encourage young minds to see the world in new ways, treating students as individual beings and leading them to fresh concepts and new insights which consequently will lead to a student's examining himself and his relationship to the world. Liberal education is an involvement in the process of making better human beings, in improving men's lives. It follows then that a student is not assured of receiving such an education just by the procedure of his taking a few courses in history, economics, and art; nor is the student who pursues a degree in the professional areas like education and business thereby denied receiving such a liberal education. Any teacher who gets his students to think about evidence and then proceeds to principles is engaged in liberal education.

In a 1969 article entitled "The Liberal Educator", Raymond Nelson wrote:

> "John Henry Newman doubtless had some such idea in mind when he wrote of liberal education. His gentleman is a model of human urbanity, equally at home in the study or the drawing room. He is admirable at virtually every point, the sophisticated product of aristocratic education in nineteenth century England. The difficulty is that the class of men of whom Newman wrote, by and large, are not the students which today populate most American colleges, whereas the students of whom Newman spoke were generally of the

> wealthy leisured class, deriving their livings from land or investments, most American students are committed to gainful employment after graduation if not before. American students expect to take their place in commerce, industry or the professions after several years of college, and they expect to be prepared to earn their way. The distinction which Newman made between "liberal" and "useful" education is often invidiously applied to departments and courses in American colleges and universities, with untold harm to all concerned. It is high time that the essential difference between the liberal education of leisured aristocrats and the liberal education of the upper and middle class in a productive society should be recognized. Such a difference in students dictates a difference in educational philosophy.
>
> American college students need both skills for employment and sensitivity in the experience of life. The need for productive human beings who are at the same time sensitive and resourceful. Yet a population without a heavy concentration of such people is doomed to flatulence and banality, a condition intolerable to contemplate. It follows, therefore, that the liberal educator becomes the key person in higher education. It is his privilege to nurture those qualities in his students which will provide a cultural leavening. Whereas some of his colleagues engage merely in teaching the student how to type, how to measure and how to speak, the liberal educator engages in teaching the student why he types, draws, measures and speaks as well as how. Both emphasis – the useful and the liberal – are needed in an industrial and commercial society, and both fibers are so firmly woven together in most curricula that they cannot be unraveled without irreparable harm to each.

And, this is the essential point. It is a false and pernicious dichotomy that educators have made between vocational and liberal education; the student needs both. Whatever planning a higher education enterprise does in the field of general studies, the programming of the plan presents a substantial challenge. The departments which contribute to the general studies programs must design certain courses (experiences) which are calculated to achieve the objective of providing students with a general understanding of a field of knowledge. Moreover, in such programming it is essential to define objectives in the general studies program which are different from the objectives in the specialized study programs (usually upper division).

Constitutencies Involved in Academic Planning

Academic planning does not just happen. It involves people interacting to plan, design, and implement programs. Since the results of the academic plan will ultimately touch everyone associated with the university, broad participation by as many

of those affected as possible is encouraged. While on the one hand, broad participation in the academic planning process should be encouraged; on the other hand, the responsibility to the final plan lies in the hands of the president and his chief administrators. Individuals must be held accountable; group decision-making avoids such accountability. The vital point is that the president receives significant input from all of the relevant constituencies affected. The constituencies that should be involved in this process should include at the least the following groups: faculty, students, administrators, trustees, alumni, funding agencies and the community.

The faculty plays a crucial role in academic planning because it is around them that the message of the college is most clearly communicated and on many campuses important veto power rests with this group. Creative methods need to be devised in order to involve the faculty meaningfully into the academic planning process; at the same time, care must be taken to assure that the voice of the faculty is not disproportionate to that of other interest groups.

Because so much of the success of an institution is dependent upon the quality of its faculty and this body is so central a force in the curriculum, it is essential that the institution pays particular attention to the kind of faculty and staff that it recruits.

To have employees who are in agreement with the institution's goals and objectives is most essential to implementing the academic plan. The moments most important to the college in building this kind of staff occur when staff is added or dropped from the university. Assessing manpower needs and the identification of good prospects are responsibilities of administrators; in so far as possible, manpower needs should be anticipated in the future. In all new hiring, the institution should ascertain as well as it can whether potential new employees are in agreement with the goals and objectives of the institution. If the institution believes in its mission and goals statements, then it will attempt to hire and retain those potential employees who are most in agreement with its stances.

Because *students* and their learning are the *raison d'etre* of higher educational institutions, it is self evident that their input into the academic planning process should be actively sought. In

discussions of curricular matters and in all major policy questions having to do with the nature of the institution, students should be included. Faculty should invite students to make suggestions in developing departmental programs for majors.

Of course, administrators – especially the chief academic officer and his deans – are constantly involved in academic planning. It has been reported many times that administrators, rather than faculty, are the chief agents on campuses who encourage curricular improvement and change. Such innovations, change and reform normally result when administrative officers sense a need for them; then through persuasion and/or the use of financial incentives they encourage faculty members to make changes in practices.

Creating New Curricular Programs

For a variety of very good reasons, most educational institutions are continuously adding new elements to the curriculum. Many view such an indulgence as the judicious process that it is; many do not. Hopefully, obsolete elements will also be removed or else the curriculum will become too unwieldy and out of balance. Because of the rapid expansion of knowledge and increasing specialization in our world, undergraduate institutions must be careful in choosing new curricular directions. While growth is relatively easy for most colleges to accomplish, orderly growth is a much more difficult task. At all times, an institution needs to consider whether a given curricular program will be consistent with its goals and an appropriate commitment of its resources. Some of the usual sources of new curricular programs are listed below:

Expansion of scholarly fields
Interest of faculty
Conventional wisdom
Fads
Needs of society
Demand of students
Demand of external agencies
Expectations regarding graduate and professional schools
Administrative interests
Availability of funds
Institutional uniqueness

Availability of funds is one particular source for the creation of new curricular programs that developing institutions should guardedly consider. Educational priorities which are established by the Federal Government and/or foundations should not necessarily become priorities of educational institutions. The prestige and glamour of having a proposal funded should not lead these institutions into programmatic changes of their educational system which may later prove to be their burden. Availability of funds today does not necessarily mean availability of funds tomorrow.

In order to develop effective educational experiences for students, educators must begin with the needs of their students and then proceed to design programs that are consistent with the college's goals, the needs of society, and the individual students. Although faculty, students and administrators often get involved in arguments over course credits, prerequisites, graduation requirements and what have you, all of this seems especially peripheral to what a college should be all about, which is to encourage student development and to encourage him to become a learning, useful human being.

SYSTEMATIC APPROACH TO ACADEMIC DECISIONS

Planning Cycle

Any model for planning academic programs and activities should make provisions for the following functions: formulating objectives; designing alternative programs; comparing costs and benefits of alternative programs; selecting an optimal set of alternatives; managing selected alternatives and evaluating performance. The main stages in the planning cycle are represented in Figure 1. Summary statements on the planning cycle are made below:

Planning Stage – An institution must first define what it sees as its mission and then develop goals and objectives that are consistent with its mission. The objectives of the individual programs should be translated into desired student behavioral changes.

Programming Stage – Once the objectives have been identified, academic planners must design programs and activities through which each of the intended objectives will be achieved. Normally, academic programming must address itself to describing programs and activities in such areas as: major degree programs; minors; remedial work; research; continuing education; public service; admission requirements; academic counseling, utilization of educational technology; etc. The programming process requires that alternative means of achieving an objective be described and assessed to determine the value of their contribution. A basic aim of a systematic approach to academic planning is to assist the institution in determining the most effective use of its resources.

Budgeting Stage – In the budgeting stage, the relative costs and benefits of alternative ways of meeting the objectives are considered. The calculation of the resource requirements for the programs and activities being considered becomes the basis for budgeting decisions.

Decision-Making Stage – Directly related to the budgeting stage is the decision making stage in which decisions are reached on which programs and activities are to become part of the educational program.

Controlling and Evaluating Stages – The operation of programs and activities must be monitored for efficiency and effectiveness. Also, there must be an evaluation of what has been accomplished. The final chapter of this monograph – "Curricular Analysis" – suggests a format for a detailed analysis to determine program continuance.

Management Information System – Good information is the key to effective academic planning. It is essential that an institution has a well developed capability to gather systematically several kinds of information about the institution and its students and personnel such as:

* Who are the students that the college wishes to serve?
* What are the students' characteristics, qualifications and backgrounds?
* What kinds of family, ethnic and economic backgrounds do the students have?
* What are the student's aspirations and the quality of their secondary education?
* What are the economic and social characteristics of the geographical areas from which they come?
* What emphasis will be placed upon ethnic groups' heritage?
* What faculty must be recruited in relation to the educational objectives of the institution?
* What are the priorities in the development of the library, laboratories, and classrooms?

The stages in the academic planning cycle are shown in the diagram as an annual planning cycle for each program of the curriculum. Such a cycle should provide for more meaningful budget preparations in the context of a PPB System.

This construct provides a systematic approach to planning, programming and budgeting educational activities. Several developing colleges and universities have already embarked upon the formalized computerized planning system known as

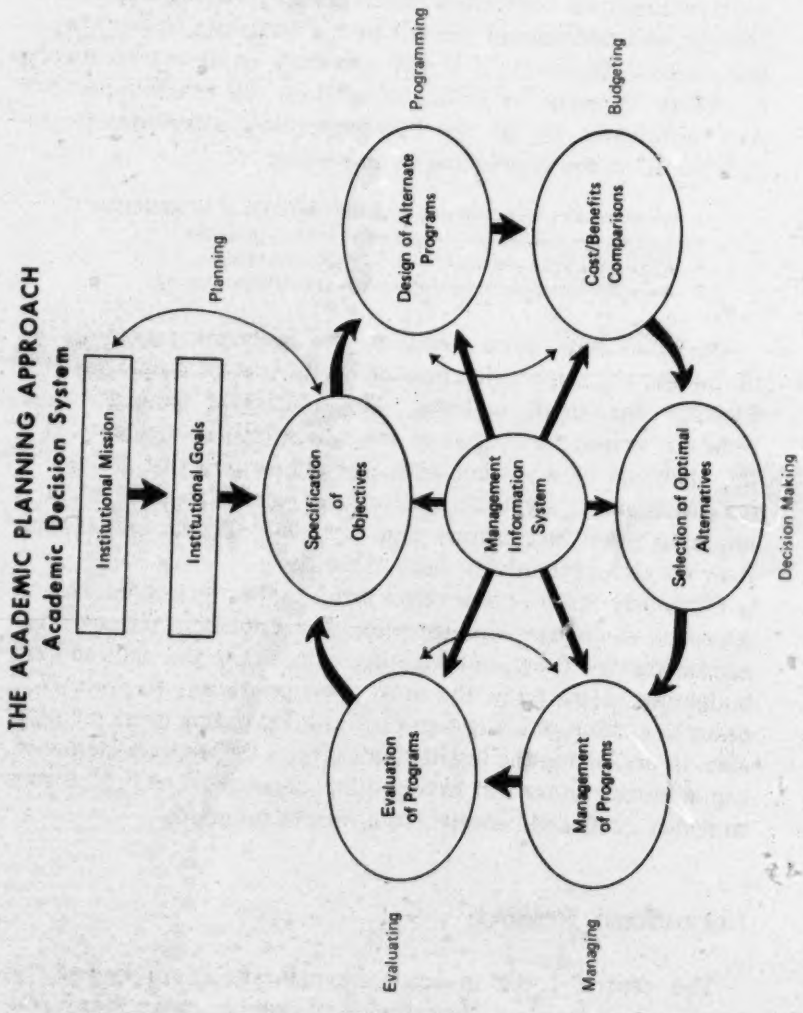
THE ACADEMIC PLANNING APPROACH
Academic Decision System
Institutional Mission
Institutional Goals
Planning
Specification of Objectives
Programming
Design of Alternate Programs
Budgeting
Cost/Benefits Comparisons
Management Information System
Selection of Optimal Alternatives
Decision Making
Evaluation of Programs
Evaluating
Management of Programs
Managing

FIGURE I

Planning Programming Budgeting System (PPBS). Many view this technical process as an important aid to academic planning. In contrast to the usual type of planning, PPBS is an attempt to provide a rational framework which relates planning, managerial control, and operational control to the budgeting and information system. However, it is not necessary to have a computer capability in order to utilize effectively the PPBS approach. Any systematic use of the PPBS approach offers significant benefits in academic planning by providing:

- A rational means of clarifying goals and objectives of an institution.
- An effective manner for allocating resources to programs.
- A framework for systematic planning and forecasting.
- A realistic schedule for program review and decision making.

Questions have been raised in the literature regarding the usefulness and appropriateness of the format of a rigorous PPB System for small colleges. The important consideration, however, is not the format of the system but its elements. It is the elements of a system with this philosophy that should be institutionalized by each institution, regardless of size. It is imperative that institutions plan, program, allocate and expend their resources effectively and efficiently.

Obviously PPBS is more than just a tool or technique; it is an approach to college administration with enormous potential for administrators. Program budgeting, rather than the old line item budgeting, seems to be the most appropriate way to proceed in order to encourage institutions towards becoming more manageable. In organizing the institution's efforts by program elements, top administrrators will have a more organized and logical way to realize costs and benefits from various programs.

Institutional Research

The central focus in academic planning is, of course, on teaching and learning. Nevertheless in order to make sound educational judgements, sound research is essential. Administrators have a need to know what works and what does not. Systematic data gathering and analysis on such matters as teaching load, evaluation of instruction, compensation policies, costs, benefits, course enrollments, and a host of other concerns are vitally

important pieces of information for academic planners. For too long educational administrators have denied themselves access to the kind of top level staff that a like sized business firm or government agency would consider essential to running its affairs.

This kind of staff capability might easily be developed in an "Analytical Studies Group" whose responsibility would transcend mere information gathering as embodied in the MIS function discussed above. This group would also analyze and recommend changes that would lead to improvements in institutional effectiveness and efficiency. The group might function in a real sense as the institutional change agents, the catalyst to promote the kinds of changes in which the institution should be involved for its own improvement.

CONCLUSION

A systematic approach to academic planning will facilitate decision-making on curricular matters and may provide the vehicle for effective instruction and viable curriculum development; in this framework, the emphasis is on attainment of objectives rather than simply participation in activities. The approach will afford academic planners several benefits:

- Goals and objectives of educational programs are made more explicit and related to the needs of students and society.
- Specific plans of work to attain these objectives are set down.
- Decisions are based upon comparative analysis of costs and benefits of these plans against those of alternative methods of attaining the same results.

Public and private funding agencies will demand increasingly that educational enterprises become more involved with systematic approaches to decision-making. These agencies will want to know on what basis decisions were made. It is vital that colleges build information systems based on appropriate data in support of their total administrative and managerial functions of planning, management control and operational control.

3 | Curricular Analysis

Even though at times the changes amount to little more than what Paul Dressel has called "tinkering", it can be stated quite emphatically that curricula are constantly changing. Besides the charge of "tinkering", what can and should be questioned and criticized is whether the curricular changes that will surely come are those that will support the institution's mission. A report by the Hazen Foundation in 1968 stated in part that "one of the great indoor sports of American faculties is fiddling with the curriculum. The faculty can engage in interminable arguments during years of committee meetings about whether education should be providing useful or liberal education. They can write learned books about the difficulties of integrating human knowledge at the time of knowledge explosion. And of course the battle between general and special education is likely to go on until the end of time. Curricula are constantly being changed. New courses are introduced, new programs offered, new departments are created. . . ."

The curriculum in its most accurate formulation includes all of the knowledge and skills that are to be acquired by the student as well as those experiences to which a college or university desires to expose its students in order that they may become productive citizens of the society. Education should be a rational process and as such it is necessary that an educational system has order and overriding objectives in order to be a meaningful experience to the participants involved in the endeavor. One of the underlying and consistent themes in this document is that the college curriculum must be related in

meaningful ways to institutional goals and objectives. Curriculum designers must concern themselves not only with translating institutional goals into good programs, but also must be certain that the programs so designed are operable within the financial limitations of their respective institutions.

The previous chapter discussed academic planning from an institutional perspective. The present chapter presents suggestions for analyzing the curriculum of an institution at the departmental level. This chapter is divided into two sections. The section entitled "Departmental Curricular Analysis" presents a subjective and qualitative approach to analyzing the departmental curriculum. In many ways, such a qualitative viewpoint of the educational program is assumed by many faculty committees as they become engaged in institutional self-studies. The section entitled "The Cost-Benefit/Cost-Effectiveness Approach to Curricular Analysis" is a more quantitative way of analyzing the curriculum. By no means is such an analysis meant to be a substitute for the more qualitative analysis mentioned above. It is suggested, however, as a kind of analytical tool which can enhance the effectiveness of academic decision making when used in conjunction with the more usual qualitative approaches.

Both the qualitative and the quantitative approaches that are suggested in this chapter can be brought together in a systematic program of analysis, review, and budgeting – which some have called planning, programming and budgeting systems (PPBS). It must be emphasized that an institution or a department can begin to review its curriculum in a systematic way without getting involved in a major program of PPBS. Merely to begin in a rational manner to review what the institution is doing and why is a useful start. The kinds of questions and analyses that are suggested in the following pages may be addressed as easily to a single department as to a total college. The exercise would be a healthy one for both.

DEPARTMENTAL CURRICULAR ANALYSIS

The heart of many institutions' instructional program is at the departmental level. It should be realized, of course, that instructional programs can be, and in some cases should be,

organized in other organizational units, i.e., divisional or collegial. The term departmental is used because most colleges happen to be organized that way, not necessarily because that organizational structure is most effective. It is at the departmental level that the courses which will ultimately comprise the curriculum are conceived, nurtured, and taught. Any meaningful analysis of whether the institution's educational goals are being implemented must begin by a careful review of what is going on at the departmental level.

It is not an exaggeration to state that very little is done to evaluate the success of college curricula. To a limited extent, student evaluation forms are used by many teachers, but their use is limited almost always to a particular course or individual. Further, staff meetings usually have too many items on the agenda so that little time is available to consider curricular evaluation. This section, nevertheless, will present a program that a college might use to review its departmental course offerings in a general, all-inclusive way.

It is suggested that each academic department establish a curriculum committee composed of both faculty and students which would then be given primary responsibility for conducting the kind of evaluation outlined below. The frames of reference to keep in mind in making the evaluation, of course, are the institution's own mission and goals. These statements do not, by any means, exhaust the areas that need to be evaluated. They can be viewed as a start in the direction of looking at the department's educational program.

I. Identification of Departmental Goals and Design of Programs

Each department should define for itself what it believes its goals to be and the manner in which these goals are applicable to specific departmental programs. It is important that departmental educational goals and programs are consonant with the college's goals and objectives. The department should specifically identify how its goals and programs support the overall goals and objectives of the institution. Some institutional goals and objectives should have behavioral implications which in

turn have instructional and content implications. The departments should show how their programs relate to these implications.

II. Instructional Methods

The following are suggestive of the kinds of questions that may be raised about instructional methods:

* Are instructional strategies employed that are likely to attain the stated objectives of the courses?
* Is the faculty actively involved in ways to improve their instructional approaches? How is this demonstrated?
* What kinds of provisions are made for students of different academic ability?
* What kinds of honors program and individual study opportunities are available?
* Has the department given any consideration to how major programs can be offered to enable students to graduate in less time than the traditional period?
* Is the department responsive to adapting new and/or different ways of accomplishing the instructional objectives? For example, has it considered:
  - instructional television
  - micro teaching
  - programmed instruction
  - use of tape laboratories
  - computer assisted instruction
  - competency based instruction

III. Design of Courses

The following are suggestive of the kinds of questions that may be raised about the content of courses:

* Does the subject matter provide an opportunity for the student to gain insight into relationships of ideas within a given discipline and between disciplines?
* Do course presentations provide insights into the possibilities and the limitations of the subject matter under consideration?
* Do the courses offer the student an opportunity to understand the basic knowledge and theory of the subject matter under study, or is it a "fact" course?
* Do the courses in the Social Sciences and Humanities such as History, Literature, Economics, Sociology:
  - make efforts to widen the concepts of what constitutes the heritage of which students are to be made aware?

- offer subject matter relevant to the student and the field of knowledge?
- present materials that articulate, relate and build upon prior education of students and with life outside of the curriculum?

IV. Student Participation in Curricular Design

Since the curriculum is a means for exposing the student to a series of academic experiences, it is evident that students must have important input into their education. Suggested questions relating to student involvement in their education are listed below:

- To what extent is there student involvement in educational policy making in their major departments? Is this the right level of involvement? What other kinds of ways might they get involved?
- In what ways is student involvement encouraged which can produce important educational results for them?
- Do students have the opportunity to evaluate their educational experiences?

V. Career Aspects of Program

The practical implications of college education should never be minimized; students should have information about job skills and opportunities as related to particular major sequences. These are not always easy to identify in college programs; perhaps a major in chemistry has a clearly definable goal, but what are the skills that are most useful to the future lawyer? Furthermore, what kinds of employment are possible for graduates, particularly in fields that are not among the ones leading directly to employment in the professional areas (such as History, Political Science, or Religion)? The major responsibility for proper career guidance lies with the departments in which students spend the bulk of their time. Therefore, each department should develop and publish statements explaining competencies and skills that may be achieved in the course of its major program.

VI. Communication of Departmental Goals and Programs.

For each program, statements (they may be syllabi) are needed which will make clear to the college community the goals, objectives, instructional strategies, and so on to be involved in the program. Catalogs, at times, are confusing and often do not describe in enough detail what the college curriculum actually is. Also, college catalogs and other public relations materials seek to say all things to all people, but in fact, give little clue as to what the college is about. Usually the information that exists about courses to be offered is vague, and sometimes misleading not only to students but for experienced faculty members.

Therefore, each department should make statements for each of its courses explaining course objectives, skills to be developed, learning resources to be used, kinds of difficulties to be encountered, methods of teaching to be employed, kinds of prerequisites generally assumed and other salient factors that need to be known by prospective students. Consideration should also be given as to whether prerequisites bear any direct relationship to courses offered. If several courses in a department attempt to achieve similar or equivalent goals, this should be made clear.

VII. Commitment of Faculty to Program

Essential to the success of the instructional program is the commitment of the departmental faculty. With this in mind, the kinds of questions that might be asked regarding the faculty's commitment to the program are:

- Does the faculty have the training, interest, and experience for teaching in the areas necessary for the major program?
- Are there faculty members who have training, interest and experience to serve as generalist teachers who are in sympathy with the goals of the core curriculum program and capable of teaching in core requirement courses?
- To what extent is the faculty engaged in continuing study through research in the faculty member's area of specialization?
- Do advanced major students collaborate with faculty members in their research?

* To what extent are individual faculty members engaged in research pertinent and relevant to college teaching?
* What is the personal responsibility of individual faculty for recruiting able students to the major field:
  - prior to college in high school?
  - from among freshmen and sophomores by the impact of their courses and/or by personal contact?

VIII. Adequacy of Learning Resources

Each department must have available the learning resources which will support its instructional program in a satisfactory manner. Three questions that may be asked regarding learning resources are:

* Does the department have a plan for continuous assessment of library holdings in its field? Do the holdings seem adequate?
* Does the department have a system for evaluating library assignments made in different classes?
* Does the department assess the availability and utilization of non-print learning resources?

IX. Curricular Evaluation

Every college must continually evaluate its curriculum, and change it where necessary, to meet the everchanging requirements of both the society and its students.

* Is there an existing evaluation process or mechanism for curricular evaluation that is being used in identifying the strengths and weaknesses of the departmental academic program?
* Do the evaluation procedures parallel the educational objectives of the curriculum?
* Are curricular evaluation results translated in terms that are understandable to members of other departments and the public in general?
* Is there a periodic evaluation process (not examination) for identifying specific changes that may be needed in the departmental program, especially as it relates to particular groups of students, as a basis for giving indivdual help or planning programs for students in light of their particular progress in the program and in the department?
* Are internal criteria utliized by the department to assess its effectiveness and viability, such as:
  - What are the number and type of majors enrolling in the department, i.e., sex, ability, background factors, etc.?
  - What is the stability of their choice, i.e., how many pursue to graduation, how many fail, how many shift to other fields?

* Are external criteria used to determine the viability of the departmental work, such as:
  - Graduate school entry and success
  - Professional school entry and success
  - Level of job market entry and feedback from employers
  - Student appraisal one/two years after graduation: feedback on their satisfaction with their college preparation?

THE COST-BENEFIT/COST-EFFECTIVENESS APPROACH TO CURRICULAR ANALYSIS

Supportive of the qualitative approach discussed in the last section is what might be called the cost-benefit/cost-effectiveness approach to curricular analysis. The type of quantitative analysis discussed in this section is not a substitute for judgment. It is not a substitute for debate either. Rather, such analysis can provide the ground rules for a constructive convergent debate that narrows differences as well as clarifies issues and points of disagreement, so that the institution's decision-makers can get on to the more important task of deciding on the educational questions which confront them.

Cost-Benefit/Cost-Effectiveness Analysis

With no better educational nomenclature to describe educational costs and benefits educators are forced to use the economist's terminology in analyzing effectiveness in the enterprise of education. Since the educational "industry" can be viewed as sets of formally organized activites that consume resources to achieve certain ends, the use of economic terms is inevitable – though possibly regrettable since economists are prone to consider dollar measures as the most important ones; and educators do not.

By effectiveness is meant *how well a given program element is doing;* by benefits is meant *what the program ought to be and is doing.* Cost benefit analysis is, therefore, a means for comparing the resources to be employed (costs) on a specific aspect of the institution's program with the societal and/or educational results (benefits) likely to be obtained from it. Cost effectiveness analysis follows cost benefit analysis and is a means for

measuring the extent to which resources allocated to an accepted specific program under each of several alternatives actually contribute to an objective. In this way, different ways of achieving the objective may be compared. It is assumed that too often institutions enter into program obligations without considering all the costs or benefits involved. For example, developing colleges need to consider very carefully in their program planning for Title III support and other grant programs, how the new program can be integrated into their institutions' academic programming in such a way that when funding goes, good programs are not lost. Systematic analysis might mean rejecting some programs as not fitting into the institution's long-range program plans.

Cost-benefit and cost-effectiveness are two terms that have been used often in both government and business circles but rarely in the educational milieu. Although neither costs nor benefits can be assigned as easily within educational organizations as they can in business, this does not mean that the cost-benefit/cost-effectiveness approach cannot be useful for an academic institution. Most basically, utilizing such approaches can help administrators and faculty to better assess whether their academic programming is consistent with overall institutional goals, objectives and resources. The approach to curricular analysis that is advocated is a systematic program of analysis and review to determine in some quantitative sense what the college is doing and if it is the best way to do it.

Both cost-benefit and cost-effectiveness analyses are needed in higher education. At all times, however, one must keep in mind that academic organizations are not quite like business organizations; there is no necessary connection between academic or educational success and financial success, although a degree of the latter is required for sustained existence. On the one hand, good business practices must accommodate, not subvert, the learning atmosphere of a college; on the other hand, a college is in difficulty if its current financial state has it operating at a quality level below its capability or below the level required to fulfill its educational and social objectives. Whereas financial condition is in itself the goal of a business organization, it is but an enabling condition of an academic organization. Nevertheless, there is just as great a need in academe to utilize limited resources as efficiently and

effectively as in any other business. If this point applies to higher education generally, it applies to developing colleges even more pointedly because of their more limited financial resources.

Quantitative data need not be the only standard against which to judge alternative actions. Many academic decisions are decided upon the basis of societal needs (such as manpower needs in teaching, medicine, business) or power politics within (and without) an institution. In such instances, ways need to be thought of to include such *qualitative* costs or benefits into the analytic equation; indeed, they must be included in the equation.

Every analysis should begin by deciding what benefits should be gained, as determined by needs and values. For the most part, the basic goals of an educational institution are rooted in the values of society, nevertheless wide latitude is given to institutions in deciding their mission and goals. Once these missions and goals are decided, the ways (strategies) to achieve the goals can be compared by an anlysis of cost-effectiveness. The more the goals can be transformed into objectives stated in non-conflicting, measurable terms, the more rational will the analysis. Thus, the objective is not to maximize or minimize certain variables, but rather to provide the academic decision-maker with information so that he can select an alternative to meet such constraints as budget, manpower and time.

An example might illustrate the point better. Assume that the goal is to raise students achievement in mathematics. A number of options present themselves:

- Reducing the student teacher ratio
- Adding more mathematics to the curriculum
- Hiring better teachers
- Hiring teaching assistants to release teachers from non-teaching duties
- Extending the use of the best teachers through media.

Each of the above options is an alternative to reach the same goal and under the theory of cost-benefit analysis each can be evaluated in terms of its effectiveness in accomplishing the goals.

Problems in Cost-Benefit/Cost-Effectiveness Analysis

Many problems are inherent in this kind of cost-benefit analysis. Briefly these are:

* Problems in assessing benefits
  - Many elements are not quantifiable or easily measurable and thus defy strict quantitative or economic analysis.
  - Too often the question of benefits involves conflicting values of the different constituencies making up the educational community.
* Problems in analyzing costs
  - Analyses of programs often attempt to reduce costs and benefits to a simple measure – the dollar. The costs and benefits to be considered, however, are often quite different and some may not be directly accountable or quantifiable.
* Problems in determining effectiveness
  - It is difficult to evaluate educational outcomes. More often than not such outcomes are rooted in societal values.
  - An obvious key and difficult point on which to get all parties to achieve consensus is the selection of appropriate instruments for measuring the effectiveness of the element at hand; setting tolerances in acceptance is equally difficult to agree on.

It spite of being fraught with these kinds of operational problems, many see the cost-benefit approach to program analysis and review as a useful one.

Guidelines for Cost-Benefit/Cost-Effectiveness Analysis

An important objective of this exercise in program analysis and review, is to determine whether offerings and programs are consistent with institutional goals, objectives and resources. On another level, the use of this type of approach should lead to the asking of questions so often avoided by faculty and administrators.

Many might view this kind of analysis as a Planning, Programming and Budgeting System (PPBS). PPBS was mentioned in the Introduction of this chapter as a systematic program of analysis, review and budgeting which can result when both the qualitative and quantitative (Cost-Benefit/Cost-Effectiveness) approaches are combined with a budgeting technique which was popularized by the Department of Defense in the early 1960's. Program budgeting, as it was called, seeks to emphasize the

accomplishment of measurable goals through well-defined programs. In higher education, the approach implies greater accountability of all expenditures and a periodic justification of programs. Various program budgeting systems are already being used in such states as California, Wisconsin and Pennsylvania. A number of articles, books and manuals listed in the Bibliography will be helpful to anyone wishing to explore more deeply the subject of PPBS.

Various kinds of data are needed before effective analysis can be performed. Some of the kinds of data and information that should be collected and suggestive questions that may flow from such a collection are listed below. The Western Inter-State Commision of Higher Education (WICHE), as well as the Management Information Systems (MIS) segment of The Technical Assistance Consortium to Improve College Services (TACTICS), has written elaborate data dictionaries. The list below is only suggestive of the kinds of information that is needed to do effective analyses.

A. *DATA COLLECTION*

I. Educational goals and objectives of the institution.

II. Educational goals and objectives (stated in concrete terms) of the department in the affective, cognitive and psychomotor domains. Are they consistent with college goals and objectives?

* How?
* Why?

III. Analysis of the educational program of the department.

* Course information (per term and annually)
  - course title
  - sections offered
  - enrollment of each section
  - predominate instructional strategies
  - course objectives in terms of stated outcomes
  - measurement of realization of objectives

* Instruction costs per program (basis: full time equivalent (fte) student costs) – for direct cost calculation consider:
  - number of fte faculty
  - faculty rank and compensation structure
  - clerical support
  - materials, rentable equipment supplies
  - fte enrollment
* Other useful analyses:
  - average class size in department
  - number of small classes
  - total courses offered/fte faculty
  - department faculty rank (number and %)
  - department tenured faculty (number and %)
  - faculty load distribution; average load
  - average salary (per rank, high-low)
* Program evaluation by:
  - students, peers, superiors
* Typical major's program:
  - total credit hours
  - general studies credit hours
  - language required
* Graduates:
  - what they do
  - average salary if working
  - thoughts about program

B. *ANALYSIS*

Suggestive questions one might ask about the academic program are listed below:

I. How can we account for the variations between our institution and others in resources expended per full-time equivalent (FTE) student?

* Among similar divisions?
* Among similar departments within divisions?

II. Are the "high cost" areas at our institution a result of:

* Conscious policy decisions?
* Low quality of teaching
* An accumulation of past decisions?
* Happenstance (i.e., they just grew)?

III. To what extent are the variations inherent in the nature of the disciplines of divisions and departments?

* Except for differences inherent in the nature of the disciplines do students enrolled in various disciplines receive "equitable" shares of the institution's resources?
* To what extent do (can) inherently high cost disciplines (hard sciences) carry a higher price tag (e.g., through laboratory fees) i.e. can the student be asked to pay according to resources consumed?

IV. How can our institution go about improving resource utilization in academic divisions and departments without compromising educational objectives?

* Is the current distribution of resources consciously and rationally related to generally understood objectives?
* If so, what are those objectives?
* In the absence of such objectives, how are resources allocated?

V. What are the high leverage areas for improving resource utilization at our institution?

* Can the requirements for number of faculty be reduced?
  - By restructuring faculty work loads?
    - Through increased emphasis on teaching?
    - By tailoring faculty assignments to recognize strengths?
    - By modifying class-size or structure?
    - By recognizing that some fields are expanding less rapidly than others?

- By reducing number of courses offered?
  - Because better prepared entering students have already covered them?
  - Where, for whatever reason, demand has virtually disappeared?
  - Where there is substantial overlap in coverage?
  - Where we have simply added courses to keep abreast of growing knowledge rather than redesign curricula?

- By altering modes of instruction?
  - Are instructional formats tailored to define educational objectives?
  - Can greater use be made of team teaching?
  - Has the use of automated teaching methods been fully explored? Without prejudice?

- By reducing laboratory requirements for faculty?
  - Reducing number of courses requiring laboratories?
  - Using "paraprofessionals" in laboratories?

- By placing a greater share of educational burden on the student?

VI. Have the tenure structure and personnel policies of the institution been analyzed to determine if they are constraints to more effective faculty utilization?

- With requirements for members of faculty reassessed, can the *cost* of faculty be reduced?
  - Does our institution face a steady drift toward high rank (and tenure) structure?
  - Are our promotion (and retention) policies in early career states selective, or does the first contract extension really amount to tenure?
  - Do promotion policies virtually assure promotion once tenure is granted?
  - By what means can senior faculty be leveraged to take advantage of their greater experience and higher cost?

* Are our faculty compensation policies linked to an acceptable means of performance measurement?
  - Is evaluation of faculty performance consciously and systematically related to the institution's educational objectives?
* Are faculty support costs (secretarial, etc.) commensurate with benefits gained and consistent with the institution's current financial strength?
* Are salaries adequate to attract the kinds of personnel that are needed to implement our institutional program?

VII. Does the institution have well-developed goals and objectives?

* Are departmental goals and objectives consistent with university goals?
* Do courses seem to have clearly defined and measurable objectives?
* Is student input in the institutional program obtained in a systematic manner?

CONCLUSION

Analyzing the curriculum should be a constant activity of faculty and administrators. To be sure, students have always rather informally evaluated their courses of instruction and instructors; in an ever more informal sense, faculty members have received feedback from a variety of sources that has enabled them to revise periodically their particular courses. This chapter has emphasized the importance of having an ongoing process of curricular analysis which relates centrally to the mission and objectives of the institution. A systematic approach to curricular analysis can result in much more than just a more efficiently operated academic program; it can also be of assistance in making instruction more effective.

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